

AFFIDAVIT IN SUPPORT OF CRIMINAL COMPLAINT

I, Chris Gianakura, being duly sworn, hereby depose and state as follows:

1. I am a Special Agent of the Federal Bureau of Investigation (“FBI”) assigned to the Corporate and Securities Squad of the Boston Field Office. I have been employed with the FBI for 15 years. My primary duties as a member of the Corporate and Securities Squad are to investigate crimes that deal with various corporate, securities, market manipulation, insider trading, money laundering, and other economic fraud schemes.

2. As a federal agent, I am authorized to investigate violations of the United States and to execute warrants issued under the authority of the United States.

3. I submit this affidavit in support of a criminal complaint charging Xiaosong Wang and Jiali Wang (the “Defendants”) with conspiracy to commit securities fraud, in violation of Title 18, United States Code, Section 371. Specifically, the Defendants conspired with each other and others known and unknown to violate Title 15, United States Code, Sections 78j(b) and 78ff, and Title 17, Code of Federal Regulations, Section 240.10b-5.

4. The facts in this affidavit come from my personal involvement in the investigation and review of records, and information obtained from others, including other agents working on the criminal investigation as well as the Securities and Exchange Commission (“SEC”) and the Financial Industry Regulatory Authority (“FINRA”). In submitting this affidavit, I have not included each and every fact known to me about this investigation. Rather, I have included only those facts that I believe are sufficient to establish probable cause that the Defendants committed the above-described crimes.

Background

5. From at least August 2013 through at least June 2019, the Defendants engaged in a market manipulation scheme that artificially influenced the prices of publicly traded securities. The purpose of the Defendants' scheme was to make money by artificially increasing or decreasing stock prices by making the others in the market believe there was trading interest and activity in particular stocks. The Defendants executed the scheme by conducting and orchestrating manipulative trading from accounts in their own names and accounts in the names of dozens of other individuals. Through this scheme, the Defendants and their co-conspirators generated millions of dollars in illicit profits.

6. Defendant Xiaosong Wang, 31, resides in Qingdao, China, and also owns a residence located at [REDACTED] in Upton, Massachusetts. Xiaosong Wang is a citizen of the People's Republic of China. According to brokerage account application documents, Xiaosong Wang is employed at Qingdao Huayi Textile and Clothing Co., Ltd, located in China's Shandong Province. For several years, Xiaosong Wang has traveled in the summer from China to the U.S. and has departed in the fall. On July 3, 2019, Xiaosong Wang entered the United States and is currently residing at his Upton, Massachusetts residence.

7. Defendant Jiali Wang, 41, resides in Weifang, China, and also owns a residence located at [REDACTED] Weymouth, Massachusetts. He previously owned a residence at [REDACTED] Marlborough, Massachusetts. Jiali Wang is a citizen of the People's Republic of China. According to brokerage account application documents, Jiali Wang is married to [REDACTED] (an uncharged co-conspirator), and he is self-employed as an at-home trader. For several years, Jiali Wang has also traveled from China to the United States in the

summer and has returned to China in the fall. This year, he instead entered the United States on September 15th and is scheduled to return to China on October 14, 2019.

8. Xiaosong Wang and Jiali Wang live in neighboring cities in China and are believed to be cousins.

9. While there was variation in the specific manner in which the Defendants executed their scheme, they generally followed the same pattern. The Defendants used at least two brokerage accounts (and often more than two) to manipulate the price of a particular publicly traded stock. The stocks they targeted were “thinly traded,” meaning that overall trading volume was relatively low. As discussed in more detail below, the lack of buyers and sellers in thinly traded stocks can lead to large disparities or “spreads” between the price at which buyers are willing to purchase the stock, and the price at which sellers are willing to sell the stock, which is commonly referred to as the “bid-ask” spread. As a result, the prices of thinly traded stocks are often volatile and highly responsive to buying/selling activity, and such stocks often have a large bid-ask spread.

10. Using at least one account, the defendants began by placing multiple purchase or sale orders, which caused the price of the stock to increase or decrease. These orders were typically cancelled before they could be executed and appear to have been designed to deceive other traders as to the true levels of supply or demand in the market.

11. Having artificially manipulated the price of the stock, the Defendants then used at least one other account to purchase or sell larger quantities of the same stock and profit from the change in price they had caused through their manipulative buy/sell orders in the first instance.

12. The Defendants held these accounts at different brokerage firms in an apparent attempt to conceal from each firm the coordination between the two types of accounts. This type of trading activity is commonly referred to as “spoofing.”

13. As part of the scheme, the Defendants also engaged in additional conduct that was designed to avoid detection. For example, the Defendants used dozens of brokerage accounts held in the names of individuals and entities other than themselves (“nominee accounts”), shared access to these nominee accounts to make their manipulative trades, and misrepresented the nature of their trading to brokerage firms.

14. As described in more detail below, digital forensic evidence establishes that Xiaosong Wang and Jiali Wang effectively controlled many of these nominee accounts, either accessing them themselves or closely coordinating the trading activity in them. Many of these accounts were accessed at various times during the conspiracy from the same internet protocol (“IP”) addresses that were used to access brokerage and bank accounts in the names of Xiaosong Wang and Jiali Wang. Moreover, there were numerous instances in which nominee accounts were accessed from IP addresses located in the District of Massachusetts, despite the fact that many of the nominal owners of the accounts were purportedly Chinese nationals who had never traveled to the United States or were not in the United States when the accounts in their names were accessed.

15. Several nominee accounts were opened with the same email addresses, including email addresses that belonged to the Defendants and were used in connection with accounts in the Defendants’ names. Many of the nominee accounts were accessed from common IP addresses (often simultaneously) both domestically and abroad, and in some cases were accessed

from the same internet-connected device—in other words, the same computer or phone/tablet—further demonstrating the common control and coordinated use of these accounts.¹

16. Finally, activity in the nominee accounts often made no economic sense other than to artificially move the price of a security for the ultimate benefit of another account trading in coordination.

The Market Manipulation Scheme

17. During the conspiracy, the Defendants schemed to manipulate the market prices of thinly traded securities approximately 3,900 times through coordinated trading designed to artificially affect the prices of those securities, and to induce others to buy and sell those securities at the resulting artificially high or low prices. The Defendants and their co-conspirators typically manipulated the price of a security as follows:

Acquiring Shares at Artificially Low Prices

18. First, one or more accounts placed orders on stock exchanges² to sell a thinly traded security at prices below the prevailing national best bid (“NBB”) or prevailing national best offer (“NBO”) (collectively referred to as the “NBBO”) ³. These sell orders were designed to falsely suggest increased supply in the market and to drive prices down. As described herein,

¹ This can be done by review of the media access control (“MAC”) address, which is a unique value associated with a piece of computer hardware that allows the hardware to be identified on a computer network.

² As used herein, “exchange” means a national registered market for the purchase and sale of securities that provides public information on security order prices.

³ National best bid or offer is a regulation that requires brokers to execute customer trades at the best available offer/ask price when buying securities and best available bid price when selling securities.

these orders would typically be canceled after they affected the stock prices, but before they could be filled. As a result of these sell orders, the NBBO was artificially lowered.

19. After the NBBO had been artificially depressed, one or more different accounts placed large buy orders on non-exchange venues.⁴ These accounts were typically held at different brokerage firms and/or in different names than the accounts used for the initial manipulative sell orders. Had these large buy orders been placed on an exchange, at least some of them would have been matched with the outstanding manipulative sell orders. However, because the operators of the accounts caused their orders to be sent to non-exchange venues, the account orders rarely crossed. Instead, the orders to buy the security were usually filled at artificially low prices within the manipulated NBBO at non-exchange venues.

Selling Shares at Artificially High Prices

20. Once enough shares had been accumulated at the artificially depressed prices, the accounts that placed the initial sell orders cancelled their outstanding orders and these accounts began manipulating the NBBO in the other direction – by placing buy orders at prices above the prevailing NBBO. As a result of these buy orders, the NBBO artificially increased.

21. After the NBBO had been artificially inflated, the accounts that held the stock placed large sell orders on non-exchange venues for the shares they had acquired when the NBBO was artificially depressed.

22. Once the shares were sold at the artificially inflated prices, the outstanding buy orders were cancelled, and the process could begin again.

⁴ As used herein, non-exchange venues refer to alternative trading systems other than exchanges that match buyers and sellers for transactions, in which trades can be executed.

23. The Defendants also varied the format of their manipulative activity during the conspiracy. For example, at times one or more of the Defendants purchased shares of a stock at its prevailing market price (essentially skipping the steps described in Paragraphs 18 and 19), and then manipulated the price upward and sold that stock at artificially inflated prices, as described in Paragraphs 20 to 23. At other times, the Defendants sold large amounts of stock short before manipulating the price of the stock downward, as outlined in Paragraphs 18 and 19, so they could then cover their short sales by purchasing the stock at artificially low prices.⁵ While the Defendants varied the format of their manipulative activity in other ways as well, one consistent thread in their manipulations was the use of one set of accounts to move the NBBO for a security so that they could buy or sell the security in other accounts at artificially depressed or inflated prices on non-exchange venues.

Obtaining Brokerage Accounts to Execute the Manipulation Scheme

24. In order to execute this scheme, the Defendants needed numerous brokerage accounts. They opened these accounts at U.S. brokerages in their own names and the names of dozens of other individuals and at least one entity that Jiali Wang controlled, as described below.

25. In early 2012, Jiali Wang began opening brokerage accounts in his own name at various brokerage firms in the United States. By early 2013, however, at least four of those accounts had been closed because the brokerages detected manipulative trading activity. Although Jiali Wang continued to maintain other brokerage accounts, he began working in concert with other individuals to open accounts in those other individuals' names and in the

⁵ A "short sale" is a sale of stock that an investor does not own, and a "cover" in this context means purchasing stock in order to return the borrowed stock that had been sold short to the lender. Short sales typically represent an expectation that the price of a stock will decline.

name of an entity, Forrest (HK) Co., Limited (“Forrest (HK)”), in an apparent effort to disguise his trading.

26. For example, in April 2013, Jiali Wang opened a brokerage account in the name of [REDACTED] (an uncharged co-conspirator) at a United States-based brokerage firm (the “[REDACTED] Account”). To open the [REDACTED] Account, Jiali Wang sent a bank statement and utility bill in the name of [REDACTED] to the brokerage firm from the following email address: [REDACTED]@163.com.⁶ Jiali Wang used the same email account to open previous brokerage accounts in his own name and, upon his entry into the United States on September 15, 2019, verified to U.S. Customs and Border Patrol agents that this was his email address. After Jiali Wang opened the [REDACTED] Account, Jiali Wang traded through this account as well as another account in [REDACTED]’s name.

27. Jiali Wang also traded through various brokerage accounts in the name of Forrest (HK), an entity that was owned by his wife and uncharged co-conspirator [REDACTED] according to brokerage account opening documents. For example, on several dates during the conspiracy, Forrest (HK) placed orders to buy and/or sell stock from the same IP address from which Jiali Wang accessed brokerage accounts in his own name. Jiali Wang also communicated on Forrest (HK)’s behalf with one of Forrest (HK)’s brokerage firms, and he paid for Forrest (HK)’s use of a trading platform.


28. Xiaosong Wang also opened brokerage accounts in his own name, and in the names of other individuals.

29. For example, in July 2014, Xiaosong Wang opened a U.S. brokerage account in his own name. The account was at the same U.S. Brokerage firm where Jiali Wang had opened

⁶ The domain 163.com is owned by NetEase, Inc., a Chinese Internet company.




an account in his own name in February 2013. Before both accounts were closed by the firm in early December 2014 because of suspicious trading activity, they were accessed hundreds of times from the same IP address and the same MAC address.

30. Like Jiali Wang, Xiaosong Wang also opened accounts in the names of other individuals. For example, in early 2018, Xiaosong Wang opened an account at a United States-based brokerage firm in the name of [REDACTED], an uncharged co-conspirator. To do so, Xiaosong Wang sent fake bank statements to the brokerage firm. Specifically, Xiaosong Wang removed his name and address from his own Bank of America statement for the period December 15, 2017, through January 17, 2018, and replaced it with [REDACTED]'s name and purported address. Xiaosong Wang also changed the last four digits of his bank account number from -0152 to -0433. Xiaosong Wang sent the doctored bank account statement to the brokerage firm on April 30, 2018. Images of the original and altered statements are included below:

Bank of America 

P.O. Box 15284
Wilmington, DE 19850

Customer service information

 Customer service: 1.800.432.1000
TDD/TTY users only: 1.800.288.4408
En Español: 1.800.688.6086
 bankofamerica.com
 Bank of America, N.A.
P.O. Box 25118
Tampa, FL 33622-5118

XIAOSONG WANG
[REDACTED]
UPTON, MA 01568-1491

Your BofA Core Checking
for December 15, 2017 to January 17, 2018

XIAOSONG WANG

Account summary

Beginning balance on December 15, 2017	\$4,004.86
Deposits and other additions	50,000.00
Withdrawals and other subtractions	-43,734.96
Checks	-0.00
Service fees	-102.00
Ending balance on January 17, 2018	\$10,167.90

Account number: [REDACTED] 0152

Figure 1: Xiaosong Wang's bank statement for the period December 15, 2017, to January 17, 2018 (highlighting added).

Bank of America

P.O. Box 15884
Wilmington, DE 19850

Customer service information

Customer service: 1.800.432.1000
TDD/TTY users only: 1.800.288.4408
En Español: 1.800.688.6086
bankofamerica.com
Bank of America, N.A.
P.O. Box 25118
Tampa, FL 33622-5118

Your BofA Core Checking
for December 15, 2017 to January 17, 2018

Account number 0433

JINGRU ZHAI

Account summary

Beginning balance on December 15, 2017	\$4,004.86
Deposits and other additions	50,000.00
Withdrawals and other subtractions	-43,734.96
Checks	-0.00
Service fees	-102.00
Ending balance on January 17, 2018	\$10,167.90

Figure 2: Altered copy of Xiaosong Wang's Bank of America statement for the period December 15, 2017, to January 17, 2018 (highlighting added).

31. The brokerage firm rejected the altered bank statement because it was too old. Xiaosong Wang responded by altering another one of his bank statements—this time for the period February 2018 through March 2018. On May 2, 2018, Xiaosong Wang sent the new altered bank account statement to the brokerage firm, which then opened an account in [REDACTED]'s name. Xiaosong Wang subsequently used the brokerage account during the conspiracy to place orders to buy and sell publicly traded stocks.



32. Bank records obtained as part of the investigation revealed that Bank of America has no record of any account with the account number listed on the doctored bank statements.

33. Early on in the conspiracy, Xiaosong Wang and Jiali Wang engaged in manipulative trading with each other in accounts in their own names and, at times, did so from the same IP addresses. For example, within the span of a few minutes on September 19, 2014, thousands of shares of a thinly traded stock were bought and sold through brokerage accounts in the names of the Defendants—all from the same IP address. As the conspiracy continued, however, Xiaosong Wang and Jiali Wang more often engaged in manipulative trading through nominee accounts, including those identified below.

Uncharged Co-Conspirators

34. Several of the individuals and entities whose accounts were used to perpetuate the trading scheme are identified in the table below. Biographical information about these individuals and entities comes from brokerage account opening documents. Also included is a summary of some of the digital forensic evidence demonstrating joint access and common control of the accounts. Many of these nominees had accounts at multiple brokerages.

35. As set forth in the chart, during the conspiracy, at least one of each of the individual nominee's brokerage accounts was accessed from: (1) the same IP address that was used at some point to access at least one of Xiaosong Wang's or Jiali Wang's accounts; (2) the same MAC address that was used to access at least one of Xiaosong Wang's or Jiali Wang's accounts; or (3) both the same IP and MAC address that was used to access at least one of Xiaosong Wang's or Jiali Wang's accounts. Neither Xiaosong Wang nor Jiali Wang was an authorized trader on any of these accounts.

Name	Age	City/Country of Residence	Employer	Links to Xiaosong Wang Accounts	Links to Jiali Wang Accounts
	33	Huimin, China	RuiZhi Computer Technology	Accounts accessed from same IP address	Accounts accessed from same IP address
Forrest (HK) Co., Limited	N/A	Hong Kong	N/A	Accounts accessed from same IP address Accounts accessed from same MAC address	Accounts accessed from same IP address Accounts accessed from same MAC address
	29	Taian, China	Taian Tailian Xin Nengyuan Co. Ltd.	Accounts accessed from same IP address Accounts accessed from same MAC address	Accounts accessed from same IP address
	38	Weifang, China	Forrest (HK) Co. Ltd	Accounts accessed by the same IP address	Accounts accessed from same IP address
	66	Weifang, China	NA - Retired	Accounts accessed from same MAC address	Accounts accessed from same MAC address
	32	Shanghai, China	Ya Lan Advertising Co.	Accounts accessed from same IP address Accounts accessed from same MAC address	Accounts accessed from same IP address
	30	Taian, China	Taian Huasheng Communication Technology Co. Ltd.	Accounts accessed from same IP address Accounts accessed from same MAC address	Accounts accessed from same IP address
	61	Qingdao, China	Qingdao Sean Group Limited By Share Ltd.	Accounts accessed from same IP address	Unknown
	32	Qingdao, China	Qingdao Qi Yuan Engineering Technology Co., Ltd	Accounts accessed from same IP address	Unknown

Name	Age	City/Country of Residence	Employer	Links to Xiaosong Wang Accounts	Links to Jiali Wang Accounts
	47	Weymouth, Mass.	WV Forrest Investments LLC ⁷	Accounts accessed from same IP address	Accounts accessed from same IP address
	56	Qingdao, China	N/A - Retired	Accounts accessed from same IP address	Accounts accessed from same MAC address
	33	Shanghai, China	Baosteel Group Corporation.	Accounts accessed from same IP address	Accounts accessed from same IP address
	37	Shanghai, China	Baosteel Group Corporation.	Accounts accessed from same IP address Accounts accessed from same MAC address	Accounts accessed from same IP address Accounts accessed from same MAC address
	30	Taian, China	Taian Jiankong Shebei Anzhuang Co. Ltd.	Accounts accessed from same IP address Accounts accessed from same MAC address	Accounts accessed from same IP address
	45	Feicheng, China	Yiyang Zhongxin Elementary School	Accounts accessed from same IP address Accounts accessed from same MAC address	Accounts accessed from same IP address
	60	Qingdao, China	N/A - Retired	Accounts accessed from same IP address	Accounts accessed from same MAC address
	33	Taian, China	Taian Honghuanglan Parent-Child Paradise.	Accounts accessed from same IP address Accounts accessed from same MAC address	Accounts accessed from same IP address
	32	Weifang, China	Weichai Power Co., Ltd.	Accounts accessed from same IP address Accounts accessed from same MAC address	Accounts accessed from same IP address

⁷ [REDACTED] is in fact a phlebotomist employed at the [REDACTED] in Boston.

Name	Age	City/Country of Residence	Employer	Links to Xiaosong Wang Accounts	Links to Jiali Wang Accounts
██████████	27	Qingdao, China	Qingdao Qiyuan Gongchengjishu	Accounts accessed from same IP address	Accounts accessed from same MAC address

36. As noted, ██████████ is Jiali Wang's wife and is the director and owner of Forrest (HK) Co. Ltd., according to brokerage account documents.

37. ██████████ is Jiali Wang's brother.

38. ██████████ resides at ██████████ in Weymouth, Massachusetts. Jiali Wang resides in Apartment ██████ in that same building. ██████ bought her residence in June 2018—about two months before Jiali Wang bought his. Travel records indicate that Jiali Wang was scheduled to visit Anchorage, Alaska for 10 days with ██████, beginning September 24, 2019. ██████ is also the sole listed officer of a Massachusetts registered company WV Forrest Investments LLC ("WV Forrest"), and its listed address is Jiali Wang's Weymouth residence. Jiali Wang is not a registered representative of WV Forrest but funded the incorporation and wrote checks worth at least \$1.8 million to WV Forrest in the fall of 2018.

39. According to visa records and other sources, ██████████ is Xiaosong Wang's mother. Her accounts were accessed from the same IP addresses and MAC addresses that were used to access accounts belonging to Xiaosong Wang and Jiali Wang.

40. Several of the nominee accounts were opened with common email addresses that were used by Xiaosong Wang and Jiali Wang. For example,

a. In 2017 and 2018, brokerage accounts in the names of [REDACTED], [REDACTED], [REDACTED] and Xiaosong Wang were all opened using email address [REDACTED]@qq.com.⁸

b. Also in 2017 and 2018, brokerage accounts in the names [REDACTED], [REDACTED], [REDACTED], [REDACTED], and Xiaosong Wang were opened using email address [REDACTED]@qq.com; and

c. In 2018, brokerage accounts in the names of [REDACTED], [REDACTED], and [REDACTED] were opened using email address [REDACTED]@qq.com.

41. These common email addresses provided to brokerages are significant because brokerages regularly communicate account information, including notification of suspicious trading activity, via email. Both Defendants have communicated with brokerages via email regarding suspicious trading in their accounts, as described below.

Examples of Manipulative Trading

42. Five examples of the more than 3,900 instances of manipulative trading by the Defendants designed to induce the purchase and sale of securities by other market participants at artificially low and/or high prices are summarized below. In each of the examples below, I believe that Xiaosong Wang, Jiali Wang, and their co-conspirators placed numerous orders on exchanges to buy and/or sell publicly traded stocks with no intention of having those trades executed. Instead, the purpose of those orders was to manipulate the price of these thinly traded stocks. Separately, Xiaosong Wang, Jiali Wang, and their co-conspirators used other accounts to

⁸ The domain qq.com is owned by a Chinese Internet company.

profit from this price manipulation by buying and selling large quantities of the stock in non-exchange venues.

Example 1: January 4, 2016 Manipulative Trading in GLDX

43. On January 4, 2016, accounts in the names of [REDACTED] and Forrest (HK) manipulated the price of Global X Gold Explorers ETF (“GLDX”), which is listed on NYSE. As noted, [REDACTED] is Defendant Jiali Wang’s brother, and Jiali Wang’s wife, [REDACTED], owns Forrest (HK). Over the course of the day, the accounts generated approximately \$3,548 in illegal profits. Below is a summary of the manipulative trading activity:

- a. At 9:31:08 AM, the [REDACTED] account purchased 8,998 shares of GLDX from a non-exchange venue at prices between \$16.61 and \$16.65 per share—prices that were within the NBBO at the time.
- b. In part because of these purchases, the NBBO for GLDX rose to \$16.96 by \$17.03 per share (i.e., the highest marketplace bid to buy the stock was \$16.96 per share; the lowest marketplace offer to sell the stock was \$17.03 per share).
- c. Between 10:26:29 AM and 10:29:10 AM, two Forrest (HK) accounts sent seven orders to exchanges to buy a total of 700 shares of GLDX. The orders were placed at progressively higher prices from \$16.98 to \$17.14 per share. These were not bona fide orders—they were instead intended to drive up the price of GLDX by falsely signaling increased demand for the stock. The tactic was successful. None of Forrest (HK) orders were filled (they were all below the lowest offer price on the exchange), but they nonetheless drove up the price of GLDX. By 10:30:52 AM, the NBBO for GLDX had risen to

\$17.06 by \$17.14 per share at least in part because of the Forrest (HK)'s buy orders.

- d. Once the Forrest (HK) accounts had driven up the price of GLDX, the [REDACTED] account sent a sell order to a non-exchange venue for all of its 8,998 shares of GLDX. Sending the order to a non-exchange venue ensured that the sell order would not be matched with the phony Forrest (HK) buy orders, which were still pending on the exchanges and existed only to drive up the share price.
- e. The [REDACTED] account ultimately sold all 8,998 shares in several blocks in just over a minute to unwitting victims of the price manipulation.
- f. All of the Forrest (HK) buy orders were cancelled before they could be filled.
- g. Through this coordinated trading, the [REDACTED] account was able to buy 8,998 shares of GLDX at prices between \$16.61 and \$16.65 per share and then sell 8,998 shares of GLDX at prices between \$17.02 and \$17.07 per share.

Example 2: June 16, 2014 Manipulative Trading in IFMI

44. On June 16, 2014, accounts in the names of Jiali Wang, [REDACTED], and Forrest (HK) manipulated the stock price of Institutional Financial Markets Inc. ("IFMI"). Over the course of the day, the accounts caused several manipulations of IFMI's share price, generating about \$941 in profits. Below is a summary of the manipulative trading activity:

- a. At 11:12:03 AM, the NBBO for IFMI was \$2.00 by \$2.05 per share.
- b. At 11:12:03 AM, an account in the name of Forrest (HK) placed an order on an exchange to sell 100 shares of IFMI at \$2.02 per share. The Forrest (HK) account was accessed from a computer with the username "wangjiali", the MAC address

d4:be:d9:98:03:c4, and the U.S.-based IP address 73.186.85.150. That same day, June 16, 2014, Jiali Wang logged into his bank account from the same IP address (73.186.85.150), and prior to June 16, 2014, Jiali Wang had logged into a brokerage account in his name from a computer with the same MAC address (d4:be:d9:98:03:c4). I therefore believe that Jiali Wang was placing orders from the Forrest (HK) account on June 16, 2014.

- c. Three seconds later, at 11:12:06 AM, an account in the name of [REDACTED] placed an order on a non-exchange venue to buy 3,000 shares of IFMI at \$2.02 per share. The order was immediately filled by other market participants. Like the Forrest (HK) account, the [REDACTED] account was accessed from a computer with the username “wangjiali”; the same MAC address described above (d4:be:d9:98:03:c4), and the same U.S.-based IP address described above (73.186.85.150). [REDACTED] was not in the United States at the time. I therefore believe that this account was also accessed by Jiali Wang on June 16, 2014.
- d. Then, just seconds after the [REDACTED] account’s order was filled, the Forrest (HK) account cancelled its order to sell 100 shares of IFMI at \$2.02 per share.
- e. Between 11:28:50 AM and 11:29:19 AM, the aforementioned Forrest (HK) account and another account in the name of Forrest (HK) placed nine orders to sell IFMI. These orders ranged in size from 500 to 100 shares; they were placed at progressively lower prices from \$1.97 to \$1.92 per share; and they were sent to exchanges. These were not bona fide orders—they were instead intended to drive down the price of IFMI by falsely signaling increased supply of the stock.

- f. At least in part because of these manipulative sell orders, by 11:29:20 AM, the NBB for IFMI had fallen from \$1.97 to \$1.90, and the NBO had fallen from \$2.00 to \$1.92 per share.
- g. Once the Forrest (HK) trades had artificially deflated the price of IFMI, the [REDACTED] account immediately placed an order on a non-exchange venue to buy 3,000 shares of IFMI. Sending the order to a non-exchange venue ensured that the buy order would not be matched with the phony Forrest (HK) sell orders, which were still pending on the exchanges and existed only to drive down the share price. The [REDACTED] account order was immediately filled at \$1.92 per share. Within seconds, the two Forrest (HK) accounts canceled all of their outstanding orders on exchanges to sell IFMI.
- h. Having purchased IFMI shares at an artificially low price, the [REDACTED] Account relied on the Forrest (HK) account to then drive up the IFMI price so the [REDACTED] account could sell its shares at a profit. Between 3:47:08 PM and 3:47:32 PM, one of the Forrest (HK) accounts placed seven orders to buy a total of 700 shares of IFMI stock. These orders were placed at progressively higher prices from \$2.08 to \$2.16 per share, and they were sent to exchanges. Again, these were not bona fide orders—they were intended only to drive up the price of IFMI by falsely indicating increased demand for the stock. By 3:47:41 PM, the NBB for IFMI had risen from \$2.07 to \$2.16, and the NBO had risen from \$2.10 to \$2.19 per share at least in part because of the manipulative orders from Forrest (HK).

- i. At 3:47:41 PM, the [REDACTED] account placed an order with a non-exchange venue to sell 9,000 shares of IFMI for not less than \$2.16 per share.⁹ Only 200 shares of the [REDACTED] account's order was filled and the remainder was cancelled at 3:47:43 PM.
- j. At 3:47:49 PM, the Forrest (HK) account placed an order on an exchange to buy 200 shares of IFMI at \$2.16 per share. Seconds later, while that order was still outstanding, the [REDACTED] account placed an order on a non-exchange venue to sell 5,000 shares of IFMI for not less than \$2.16 per share. Only 200 shares of the [REDACTED] account's order was filled and the remainder was canceled at 3:47:57 PM.
- k. Over the next several minutes, the Forrest (HK) and [REDACTED] accounts repeated this manipulative trading pattern, with the Forrest (HK) account placing orders on exchanges that were intended only to help the [REDACTED] account sell its shares on non-exchange venues by falsely signaling market demand for the stock at those prices. Through this manipulative trading, the [REDACTED] account was able to purchase IFMI shares at prices between \$1.92 and \$2.02 and sell them at prices from \$2.08 to \$2.16.

Example 3: January 21, 2016 Manipulative Trading in CHSCP

45. On January 21, 2016, accounts in the names of [REDACTED] (Jiali Wang's wife) and Forrest (HK) (again, owned by [REDACTED]) manipulated the stock price of CHS Inc. 8% Preferred

⁹ At the time, the Forrest (HK) account had an outstanding order on an exchange to buy 100 shares of IFMI at \$2.16 per share. By placing the order on a non-exchange venue, the [REDACTED] account avoided the unprofitable scenario of having part of his order filled by the Forrest (HK) account.

Shares (“CHSCP”), which is listed on NASDAQ. The [REDACTED] and Forrest (HK) accounts that traded CHSCP on January 21, 2016, accessed those accounts from the same IP address. Over the course of the day, the accounts generated approximately \$26,017 in illegal profits. Below is a summary of the manipulative trading activity:

- a. Between 1:45:32 PM and 3:13:32 PM, the [REDACTED] account purchased 32,691 shares of CHSCP on non-exchange venues for prices ranging from \$29.315 to \$30.04 per share.
- b. At 3:22:41 PM, the NBB for CHSCP was \$30.08; the NBO was \$30.41 per share.
- c. Over the next few minutes, a Forrest (HK) account sent four orders to exchanges to buy a total of 400 shares of CHSCP. The orders were placed at progressively higher prices from \$30.11 to \$30.30 per share. These were not bona fide orders—they were instead intended to drive up the price of CHSCP by falsely signaling increased demand for the stock. Because all of these buy orders were below the prevailing NBO, they were not filled. These orders nonetheless drove up the price of CHSCP, and by 3:25:13 PM, the NBB for CHSCP had risen to \$30.30, and the NBO had risen to \$30.50 per share at least in part because of Forrest (HK)’s manipulative buy orders.
- d. Just two seconds after the last Forrest (HK) buy order was placed, the [REDACTED] account placed orders to sell 9,600 shares of CHSCP. If these orders had been placed on an exchange, at least some would likely have been matched with several outstanding Forrest (HK) buy orders. To avoid that possibility, the [REDACTED] account placed the sell orders on non-exchange

venues, and they were filled by other unwitting market participants at prices ranging from \$30.28 to \$30.32 per share.

- e. By 3:37:45 PM, the NBB for CHSCP had fallen to \$30.09, and the NBO had fallen to \$30.38 per share. I believe that this was an unintended consequence of the fact that the [REDACTED] account had placed such large sell orders.
- f. In order to drive up the price of CHSCP again, two Forrest (HK) accounts sent forty-five 100-share buy orders to exchanges for CHSCP, typically at progressively higher prices from \$30.13 to \$30.58 per share. The orders were placed over the course of about 10 minutes, and because these bids were structured to never exceed an offers to sell, they were never filled. Again, these were not bona fide orders—they were intended to drive up the price of CHSCP and enabling the [REDACTED] account to sell its shares on non-exchange venues at a profit.
- g. By 3:47:21 PM, the NBB for CHSCP had risen to \$30.40, and the NBO had risen to \$30.60 per share at least in part because of Forrest (HK)'s buy orders.
- h. Between 3:47:21 PM and 3:51:25 PM, the [REDACTED] account sent several large sell orders (ranging in size from 631 to 3,800 shares) to non-exchange venues for CHSCP. If these orders had been placed on an exchange, at least some would have been matched with outstanding Forrest (HK) buy orders. To avoid this possibility, the [REDACTED] account sold the shares on non-exchange venues at prices between \$30.15 and \$30.42 per share.
- i. Through this coordinated, manipulative trading, the [REDACTED] account was able to acquire shares of CHSCP at prices between \$29.315 and \$30.04 per

share, and then sell them for a profit at prices between \$30.15 and \$30.42 per share.

Example 4: February 14, 2017 Trading in SGRP

46. On February 14, 2017, accounts in the names of [REDACTED] [REDACTED] and Forrest (HK) manipulated the stock price of SPAR Group Inc. (“SGRP”), which is listed on NASDAQ. The [REDACTED] and [REDACTED] accounts on that day accessed the accounts from the same IP address, which resolved to a Chinese internet provider. [REDACTED] was in the United States at the time. Over the course of the day, the accounts generated approximately \$5,410 in illegal profits. Below is a summary of the manipulative trading activity:

- a. At 10:30:23 AM, the NBBO for SGRP was \$1.04 by \$1.10 per share, and a Forrest (HK) account sent an order to an exchange to buy 7,500 shares for up to \$1.04 per share (i.e., a “limit price” of \$1.04 per share).¹⁰ This order initially went unfilled until the [REDACTED] account sent several orders to the same exchange to sell SGRP with a limit price of \$1.04 per share. Piece by piece, in less than a minute, the [REDACTED] account filled the entire 7,500-share buy order placed by the Forrest (HK) account.
- b. Between 10:31:37 AM and 10:48:10 AM, the Forrest (HK) account then sent multiple 100-share sell orders for SGRP to exchanges at descending prices from \$1.08 to \$1.01 per share. These were not bona fide orders—they were intended only to drive down the price of SGRP and enable the [REDACTED] account to acquire additional shares at an artificially low price.

¹⁰ The “limit price” on a buy order is the maximum price the purchaser will pay for the shares. Offers to sell to the purchaser at a price higher than the limit price would be rejected.

- c. By 10:48:16 AM, the NBB for SGRP had fallen to \$1.01, and the NBO had fallen to \$1.04 per share at least in part because of Forrest (HK)'s manipulative sell orders.
- d. Between 10:48:16 AM and 10:48:23 AM, the [REDACTED] account and the [REDACTED] account sent three large buy orders to non-exchange venues (ranging from 5,900 to 18,600 shares) for SGRP with limit prices of \$1.04 per share. Placing the orders with a non-exchange venue avoided the possibility that the orders would be filled by the Forrest (HK) account, which had several sell orders pending on the exchange. By 10:48:24 AM., these orders the [REDACTED] and [REDACTED] accounts were filled at prices between \$1.04 and \$1.035 per share.
- e. This pattern of manipulative trading was repeated again, ultimately enabling the [REDACTED] and [REDACTED] accounts to acquire 46,000 shares of SGRP at prices ranging from \$1.028 to \$1.04 per share.
- f. Having enabled the [REDACTED] and [REDACTED] accounts to obtain shares at artificially low prices, the Forrest (HK) account began placing orders intended to artificially drive up the price and allow the [REDACTED] and [REDACTED] accounts to sell those shares at a profit.
- g. Between 11:54:27 AM and 11:56:34 AM, two Forrest (HK) accounts sent 22 orders to exchanges to buy a total of 2,101 shares of SGRP. The orders had limit prices from \$1.11 to \$1.18 per share. These orders were intended to drive up the price of SGRP and were ultimately cancelled without ever being executed.

- h. During the time these orders were placed, and at least in part because of these orders, the NBB for SGRP rose from \$1.10 to \$1.15, and the NBO rose from \$1.15 to \$1.19.
- i. At 11:56:38 AM, the [REDACTED] account sent a sell order for 15,600 shares of SGRP with a limit price of \$1.15 per share. Placing the order on a non-exchange venue avoided the possibility that the share would be sold to the Forrest (HK) account, which not only had pending orders within the price limit set by the [REDACTED] account, but placed several more buy orders on exchanges within that price over the next 12 seconds.
- j. At 11:56:51 AM, the [REDACTED] account's order to sell 15,600 shares of SGRP was filled at \$1.15 per share.
- k. Coordinated and manipulative trading in the manner described above continued, enabling the [REDACTED] and [REDACTED] accounts to sell 42,200 shares of SGRP at artificially high prices between \$1.15 and \$1.174 per share, having acquired them at artificially low prices ranging from \$1.028 to \$1.04 per share.

Example 5: September 27, 2018 Trading in BREW

47. On September 27, 2018, accounts in the names of Xiaosong Wang, [REDACTED], [REDACTED] and [REDACTED] manipulated the stock price of Craft Brew Alliance ("BREW"), which is listed on NASDAQ. As noted above, [REDACTED] is Xiaosong Wang's retired mother. Over the course of the day, Xiaosong Wang orchestrated several manipulations involving BREW, thereby generating approximately \$6,003 in illegal profits. Below is a summary of the manipulative trading activity:

- a. At 3:01:49 PM, the NBBO for BREW was \$16.05 by \$16.10 per share.

- b. Between 3:01:49 PM and 3:04:26 PM, two accounts in the name of [REDACTED] placed 21 buy orders for BREW stock. These buy orders (each for 100 to 300 shares) were sent to exchanges at prices ranging from \$16.10 to \$16.15 per share. These were not bona fide orders, but were instead intended to drive up the price of BREW by falsely signaling increased demand for the stock. The orders were all cancelled before they could ever be filled. By 3:04:29 PM, the NBBO for BREW had risen to \$16.15 by \$16.20 per share because of, at least in part, these buy orders.
- c. One of the [REDACTED] accounts was accessed that day from an IP address that resolved to Xiaosong Wang's Upton, Massachusetts condominium; IP address information was not available for the other [REDACTED] account. [REDACTED] was not in the United States at the time. Given the closely coordinated orders from these accounts, and the fact that at least one was accessed from Xiaosong Wang's condominium, I believe that Xiaosong Wang was placing orders from the [REDACTED] accounts.
- d. At 3:04:29 PM, an account in the name of [REDACTED] placed an order on a non-exchange venue to short sell 8,000 shares of BREW at \$16.50. I believe Xiaosong Wang placed these orders as well, because the [REDACTED] account was also accessed from Xiaosong Wang's Upton, Massachusetts condominium. If the [REDACTED] order had been placed on an exchange, it likely would have been filled in part by pending buy orders from the [REDACTED] accounts. To avoid that possibility, Xiaosong Wang placed the short sale order on a non-exchange venue.

- e. By 3:04:39 PM, only 300 shares of the order from the [REDACTED] account had been filled. In order to further inflate the price of BREW and make the [REDACTED] order more likely to be completed, the [REDACTED] accounts placed seven more orders on exchanges to buy BREW at \$16.15 per share. Seconds later, the remainder of the [REDACTED] account's order was filled for \$16.15 per share.
- f. At 3:05:06 PM, the NBBO for BREW was \$16.10 by \$16.15 per share.
- g. Between 3:05:06 PM and 3:05:43 PM, the [REDACTED] accounts placed seven more orders on exchanges to buy BREW stock. These orders were priced at \$16.15 per share and ranged in size from 1 share to 100 shares. Again, these were not bona fide orders, but were intended to drive up the price of BREW by falsely indicating increased demand for the stock.
- h. During the time these manipulative buy orders were placed, the NBB for BREW had risen from \$16.10 to \$16.15, and the NBO had risen from \$16.15 to \$16.20 per share at least in part because these buy orders.
- i. At 3:05:43 PM, the [REDACTED] account placed another order to short sell 8,000 shares of BREW, which was sent to a non-exchange venue in order to avoid being filled by any of the [REDACTED] account's buy orders that were still pending. By 3:05:46 PM, only a small portion of the [REDACTED] account order had been filled. In order to falsely indicate increased demand for the stock and facilitate the completion of the [REDACTED] account short sell order, one of the [REDACTED] accounts placed seven more orders on exchanges to buy

BREW at \$16.15 per share. By 3:05:53 PM, the remainder of the [REDACTED] account short sell order had been filled at \$16.15 per share.

- j. Having short sold shares at artificially inflated prices, Xiaosong Wang then engaged in manipulative trading through these accounts to drive down the price of BREW and profit from acquiring the shares at artificially low prices as shown below.
- k. At 3:18:07 PM, the NBB for BREW was \$16.15, and the NBO was \$16.25 per share.
- l. Between 3:18:07 PM and 3:28:42 PM, the [REDACTED] accounts and an account in the name of [REDACTED] placed 70 orders to sell BREW stock. These orders were generally placed at progressively lower prices from \$16.20 to \$16.00 per share; they ranged in size from 2 to 1,000 shares; and most were sent to exchanges.
- m. By 3:28:43 PM, the NBB for BREW had fallen to \$16.00, and the NBO had fallen to \$16.05 per share at least in part because of the phony sell orders placed from the [REDACTED] and [REDACTED] accounts.¹¹
- n. At 3:28:43 PM, the [REDACTED] account placed an order to buy 8,000 shares of BREW on a non-exchange venue in order to avoid being matched with any of the then-pending [REDACTED] or [REDACTED] sell orders. Initially, only a small portion the [REDACTED] account order had been filled. On order to falsely indicate increased supply of the stock, the [REDACTED] accounts sent another

¹¹ These were “naked short” sales—the accounts did not hold any BREW shares.

eight orders to sell BREW at \$16.05 per share. By 3:28:56 PM, the remainder of the [REDACTED] account order had been filled at a price of \$16.05 per share.

- o. At 3:29:03 PM, the NBB for BREW had risen to \$16.05, and the NBO had risen to \$16.10 per share.
- p. Xiaosong Wang repeated this process, causing the [REDACTED] and [REDACTED] accounts to place phony sell orders on exchanges to lower the price of BREW, and then buying BREW shares at artificially low prices through the [REDACTED] account on non-exchange venues.
- q. Through this coordinated trading, Xiaosong Wang was able to use the [REDACTED] [REDACTED] account to short sell 16,000 shares of BREW at a price of \$16.15 per share and then buy 16,000 shares of BREW to cover the short sales at a price of \$16.05 per share.

48. The pattern of manipulative trading activity shown in the five examples above was repeated thousands of times and used dozens of nominee accounts, including at least one brokerage account in the name of each of the uncharged co-conspirators identified in the chart above. This manipulative trading activity continued through at least June 2019.

Defendants' Efforts to Conceal Their Fraudulent Scheme

49. The Defendants received numerous warnings from their brokerages about their manipulative trading.

50. For example, on or about May 14, 2014, a United States-based brokerage firm sent Jiali Wang an email regarding trading in his account, a portion of which is depicted below:

To: [REDACTED]@qq.com [REDACTED]@qq.com];
 archive@interactivebrokers.com[archive@interactivebrokers.com];
 [REDACTED]@interactivebrokers.com; [REDACTED]@interactivebrokers.com;
From: IB Surveillance
Sent: Mon 3/10/2014 5:37:04 PM
Importance: Normal
Subject: Important Inquiry Regarding Your Interactive Brokers Account

Dear Jiali Wang,

We have been notified that certain recent trading activity in your account(s) is of a type that may draw scrutiny from exchanges and/or regulators. Specifically, where accounts with a single beneficial owner, or accounts under common control, or otherwise related accounts, are on both the buy side and the sell side of a transaction (often referred to as a "cross" or "wash trade"), this activity may – depending on the intent of the trader(s) – be a violation of exchange rules or of the Securities Exchange Act of 1934 or of the Commodity Exchange Act or other applicable rules and laws.

Please provide, via email, a brief explanation for the following apparent crossing trades, placed on the dates indicated, in your account(s). Please include a summary of the strategy or intent behind these transactions.

Figure 3: March 10, 2014 email from brokerage to Jiali Wang (highlighting added).

51. One week later, Jiali Wang responded by email, as depicted below:

From: [REDACTED] <[REDACTED]@qq.com>
 To: "IB Surveillance" <surveillance@interactivebrokers.com>,
 Date: 03/17/2014 08:19 AM
 Subject: Re: Important Inquiry Regarding Your Interactive Brokers Account

Dear:

All listed stocks were researched by my stock screener software. I bought the stock when I found it has a large volume of stocks traded, and sold it when the price went to be profitable. But sometime, the stock went out of my pre-judgment, and I chose to stop losses by according to the trading volume and price direction.

Meantime, symbol HSKA was one of the long-term stocks that I held, and I continued to buy more around \$7.20, and sold it in profit. Another symbol FLML took a short position at \$7.54, but I closed the position by suffering the losses because it did not go to my expected trend. And other stocks accumulated by based on the direction of the market trading volume.

If you have any concerns, please contact me by email.

Jiali Wang

Figure 4: March 17, 2014 email from Jiali Wang to brokerage.

52. Jiali Wang's response was false because he was in fact engaging in a market manipulation scheme to artificially inflate the price of certain stocks, including the securities of

HSKA and FLML. Of note, the email account he used is the same account that Xiaosong Wang used to open accounts at other brokerages. This is another indicator that the two Defendants were working together and that they maintained joint access to and control over multiple online brokerage accounts.

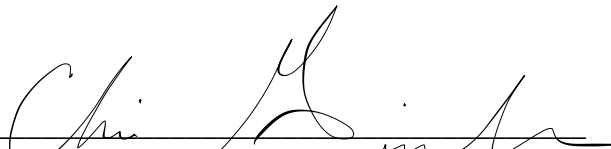
53. As another example, on or about February 29, 2016, a United States-based brokerage firm sent Xiaosong Wang an email stating, in relevant part: “[o]ur records indicate that you had orders rejected for possible cross trades violations at our firm in February. Some of the trades are noted below as follows: . . . Cross/wash trade rejects occur when a client enters an order to buy and sell a specific security simultaneously, near or at the same price. Our review is done to ensure customer protection and market integrity. Cross/wash trades can be viewed as a form of market manipulation and could result in a significant federal violation. . . Please respond in writing as to the economic rationale and/or trading strategy used when you placed the above reference trades.”

54. As Xiaosong Wang knew, several of the trades flagged by this United States-based broker were, in fact, part of the fraudulent market manipulation scheme set forth herein. But Xiaosong Wang provided the following false response: “I found that when I want to sell these positions, I used the wrong hot key, and the buy orders may be placed, so the sell orders were rejected, I have changed the setting of hot keys for Sell orders, so I think I will be ok. I apologize for any inconvenience caused the mistake.” Despite his claim of “mistake,” Xiaosong Wang went on to engage in the same type of manipulative trading activity for years following this warning.

55. Many of the nominees received warnings about their trading and/or notice that at least one of their accounts was being closed.

CONCLUSION

56. For all of the reasons stated above, there is probable cause to believe that from at least in or about August 2013 through at least June 2019 in the District of Massachusetts and elsewhere, Xiaosong Wang and Jiali Wang conspired to engage in securities fraud in violation of Title 18, United States Code, Section 371.


SPECIAL AGENT CHRIS GIANAKURA
FEDERAL BUREAU OF INVESTIGATION

Subscribed and sworn to me on this 14 day of October, 2019


HONORABLE M. PAGE KELLEY
UNITED STATES MAGISTRATE JUDGE

